**SUPPLEMENTAL MATERIALS**

**Media Exposure, Threat Processing, and Mitigation Behaviors in Gulf Coast Residents Facing the Co-Occurring Threats of COVID-19 and Hurricanes**

**Dana Rose Garfin, Rebecca R. Thompson, & Gabrielle Wong-Parodi**

**Supplemental Table I**

***Coefficients for Covariates in Models Predicting COVID-19 Health Behaviors, N=1,846***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Path | Coefficient | *p* | 95% LB | 95% UB |
| Self-Efficacy 🡨 |  |  |  |  |
| Gender | 0.21 | .015 | 0.04 | 0.38 |
| Age | 0.001 | .989 | -0.08 | 0.08 |
| White Ethnicity (vs. others) | -0.22 | .015 | -0.40 | -0.04 |
| State | 0.08 | .384 | -0.09 | 0.25 |
| Income | 0.04 | .389 | -0.05 | 0.13 |
| Bachelor’s degree | 0.09 | .334 | -0.09 | 0.26 |
| Constant | -0.09 | .350 | -0.29 | 0.10 |
| Response Efficacy 🡨 |  |  |  |  |
| Gender | 0.31 | <.001 | 0.14 | 0.47 |
| Age | 0.09 | .015 | 0.02 | 0.17 |
| White Ethnicity (vs. others) | -0.41 | <.001 | -0.58 | -0.23 |
| State | -0.04 | .634 | -0.21 | 0.13 |
| Income | 0.01 | .728 | -0.07 | 0.10 |
| Bachelor’s degree | 0.10 | .276 | -0.08 | 0.28 |
| Constant | 0.08 | .395 | -0.11 | 0.27 |
| Perceived Susceptibility 🡨 |  |  |  |  |
| Gender | 0.15 | .037 | 0.01 | 0.30 |
| Age | -0.09 | .010 | -0.16 | -0.02 |
| White Ethnicity (vs. others) | 0.19 | .015 | 0.04 | 0.35 |
| State | -0.15 | .055 | -0.29 | 0.003 |
| Income | -0.004 | .924 | -0.08 | 0.07 |
| Bachelor’s degree | 0.16 | .022 | 0.02 | 0.30 |
| Constant | -0.24 | .005 | -0.41 | -0.07 |
| Perceived Severity 🡨 |  |  |  |  |
| Gender | 0.24 | .002 | 0.09 | 0.40 |
| Age | -0.08 | .044 | -0.17 | -0.002 |
| White Ethnicity (vs. others) | 0.05 | .541 | -0.12 | 0.22 |
| State | -0.05 | .553 | -0.21 | 0.11 |
| Income | -0.001 | .983 | -0.08 | 0.08 |
| Bachelor’s degree | -0.05 | .568 | -0.20 | 0.11 |
| Constant | -0.15 | .126 | -0.34 | 0.04 |
| Social Distancing 🡨 |  |  |  |  |
| Gender | 0.10 | .143 | -0.03 | 0.24 |
| Age | 0.02 | .609 | -0.05 | 0.09 |
| White Ethnicity (vs. others) | -0.19 | .020 | -0.34 | -0.03 |
| State | 0.09 | .229 | -0.06 | 0.23 |
| Income | 0.04 | .283 | -0.03 | 0.11 |
| Bachelor’s degree | 0.18 | .006 | 0.05 | 0.31 |
| Constant | -0.07 | .453 | -0.24 | 0.11 |
| Mask Wearing 🡨 |  |  |  |  |
| Gender | 0.02 | .785 | -0.13 | 0.17 |
| Age | 0.20 | <.001 | 0.13 | 0.28 |
| White Ethnicity (vs. others) | -0.43 | <.001 | -0.59 | -0.26 |
| State | -0.07 | .393 | -0.21 | 0.08 |
| Income | -0.06 | .150 | -0.14 | 0.02 |
| Bachelor’s degree | 0.16 | .044 | 0.00 | 0.32 |
| Constant | 0.23 | .014 | 0.05 | 0.42 |
| Hand Hygiene 🡨 |  |  |  |  |
| Gender | 0.20 | .008 | 0.05 | 0.35 |
| Age | -0.04 | .328 | -0.12 | 0.04 |
| White Ethnicity (vs. others) | -0.20 | .019 | -0.36 | -0.03 |
| State | 0.09 | .243 | -0.06 | 0.25 |
| Income | -0.02 | .667 | -0.11 | 0.07 |
| Bachelor’s degree | -0.14 | .053 | -0.28 | 0.00 |
| Constant | 0.02 | .808 | -0.17 | 0.22 |
| Error Variance | Estimate |  | 95% LB | 95% UB |
| Self-Efficacy | 1.08 |  | 0.97 | 1.21 |
| Response Efficacy | 1.05 |  | 0.94 | 1.18 |
| Perceived Susceptibility | 0.91 |  | 0.81 | 1.02 |
| Perceived Severity | 1.00 |  | 0.91 | 1.11 |
| Social Distancing | 0.77 |  | 0.67 | 0.89 |
| Mask Wearing | 0.85 |  | 0.77 | 0.95 |
| Hand Hygiene | 0.83 |  | 0.70 | 0.99 |
| Error Covariance | Estimate | *p* | 95% LB | 95% UB |
| Self-Efficacy \* Response Efficacy | 0.53 | <.001 | 0.43 | 0.64 |
| Perceived Susceptibility \* Perceived Severity | 0.54 | <.001 | 0.45 | 0.63 |
| Social Distancing \* Mask Wearing | 0.36 | <.001 | 0.28 | 0.43 |
| Social Distancing \* Hand Washing | 0.31 | <.001 | 0.20 | 0.42 |
| Mask Wearing \* Hand Hygiene | 0.34 | <.001 | 0.24 | 0.43 |

**Supplemental Table II**

***Coefficients for Covariates in Models Predicting Hurricane Preparatory Behaviors, N=1,846***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Path | Coefficient | *p* | 95% LB | 95% UB |
| Self-Efficacy 🡨 |  |  |  |  |
| Gender | 0.13 | .114 | -0.03 | 0.28 |
| Age | 0.08 | .058 | -0.003 | 0.16 |
| White Ethnicity (vs. others) | 0.02 | .842 | -0.14 | 0.18 |
| State | 0.41 | <.001 | 0.25 | 0.57 |
| Income | 0.12 | .002 | 0.05 | 0.20 |
| Bachelor’s degree | 0.12 | .118 | -0.03 | 0.28 |
| Constant | -0.42 | <.001 | -0.60 | -0.24 |
| Response Efficacy 🡨 |  |  |  |  |
| Gender | 0.16 | .050 | 0.0002 | 0.31 |
| Age | 0.02 | .621 | -0.06 | 0.09 |
| White Ethnicity (vs. others) | -0.19 | .022 | -0.35 | -0.03 |
| State | 0.45 | <.001 | 0.29 | 0.61 |
| Income | 0.001 | .989 | -0.08 | 0.08 |
| Bachelor’s degree | -0.004 | .956 | -0.15 | 0.15 |
| Constant | -0.23 | .014 | -0.42 | -0.05 |
| Perceived Susceptibility 🡨 |  |  |  |  |
| Gender | 0.13 | .097 | -0.02 | 0.27 |
| Age | -0.04 | .362 | -0.11 | 0.04 |
| White Ethnicity (vs. others) | -0.15 | .062 | -0.32 | 0.01 |
| State | 0.72 | <.001 | 0.57 | 0.87 |
| Income | -0.01 | .756 | -0.09 | 0.06 |
| Bachelor’s degree | -0.07 | .377 | -0.22 | 0.08 |
| Constant | -0.37 | <.001 | -0.55 | -0.19 |
| Perceived Severity 🡨 |  |  |  |  |
| Gender | 0.22 | .006 | 0.06 | 0.39 |
| Age | 0.05 | .221 | -0.03 | 0.13 |
| White Ethnicity (vs. others) | -0.17 | .062 | -0.34 | 0.01 |
| State | 0.47 | <.001 | 0.30 | 0.63 |
| Income | 0.004 | .925 | -0.08 | 0.09 |
| Bachelor’s degree | -0.09 | .269 | -0.26 | 0.07 |
| Constant | -0.26 | .006 | -0.45 | -0.08 |
| Hurricane Preparatory Behaviors\* 🡨 |  |  |  |  |
| Gender | 0.07 | .297 | -0.06 | 0.19 |
| Age | 0.13 | <.001 | 0.07 | 0.19 |
| White Ethnicity (vs. others) | -0.10 | .170 | -0.23 | 0.04 |
| State | 0.29 | <.001 | 0.15 | 0.43 |
| Income | 0.07 | .041 | 0.003 | 0.13 |
| Bachelor’s degree | -0.01 | .827 | -0.15 | 0.12 |
| Constant | 0.72 | <.001 | 0.57 | 0.88 |
| Error Variance | Estimate |  | 95% LB | 95% UB |
| Self-Efficacy | 0.98 |  | 0.89 | 1.09 |
| Response Efficacy | 0.99 |  | 0.89 | 1.09 |
| Perceived Susceptibility | 0.87 |  | 0.78 | 0.98 |
| Perceived Severity | 0.99 |  | 0.90 | 1.09 |
| Error Covariance | Estimate | *p* | 95% LB | 95% UB |
| Self-Efficacy \* Response Efficacy | 0.58 | <.001 | 0.48 | 0.68 |
| Perceived Susceptibility \* Perceived Severity | 0.52 | <.001 | 0.44 | 0.61 |

**Supplemental Table III**

***Coefficients for Model Predicting Hurricane Preparatory Behaviors (Wave 9 Covariates including Media Exposure to 2018 Hurricanes, Collected Shortly after Hurricane Michael), 1,846***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Path | Coefficient | *p* | 95% LB | 95% UB |
| Self-Efficacy 🡨 |  |  |  |  |
| Traditional Media Exposure | 0.04 | .349 | -0.05 | 0.13 |
| Social Media Exposure | -0.03 | .524 | -0.12 | 0.06 |
| Gender | 0.09 | .298 | -0.08 | 0.25 |
| Age | 0.06 | .151 | -0.02 | 0.15 |
| White Ethnicity (vs. others) | -0.002 | .985 | -0.18 | 0.17 |
| State | 0.36 | <.001 | 0.19 | 0.54 |
| Income | 0.17 | <.001 | 0.09 | 0.25 |
| Bachelor’s degree | 0.10 | .260 | -0.07 | 0.26 |
| Constant | -0.36 | <.001 | -0.55 | -0.18 |
| Response Efficacy 🡨 |  |  |  |  |
| Traditional Media Exposure | 0.11 | .033 | 0.01 | 0.22 |
| Social Media Exposure | -0.01 | .792 | -0.12 | 0.09 |
| Gender | 0.18 | .035 | 0.01 | 0.35 |
| Age | 0.005 | .906 | -0.07 | 0.08 |
| White Ethnicity (vs. others) | -0.20 | .031 | -0.37 | -0.02 |
| State | 0.41 | <.001 | 0.23 | 0.59 |
| Income | 0.03 | .444 | -0.05 | 0.11 |
| Bachelor’s degree | -0.07 | .401 | -0.24 | 0.09 |
| Constant | -0.22 | .032 | -0.43 | -0.02 |
| Perceived Susceptibility 🡨 |  |  |  |  |
| Traditional Media Exposure | 0.22 | <.001 | 0.11 | 0.33 |
| Social Media Exposure | -0.02 | .715 | -0.13 | 0.09 |
| Gender | 0.14 | .080 | -0.02 | 0.29 |
| Age | -0.03 | .439 | -0.12 | 0.05 |
| White Ethnicity (vs. others) | -0.18 | .040 | -0.35 | -0.01 |
| State | 0.58 | <.001 | 0.43 | 0.74 |
| Income | -0.001 | .970 | -0.08 | 0.08 |
| Bachelor’s degree | -0.10 | .228 | -0.26 | 0.06 |
| Constant | -0.30 | .004 | -0.50 | -0.09 |
| Perceived Severity 🡨 |  |  |  |  |
| Traditional Media Exposure | 0.16 | <.001 | 0.07 | 0.25 |
| Social Media Exposure | 0.003 | .946 | -0.09 | 0.09 |
| Gender | 0.20 | .016 | 0.04 | 0.37 |
| Age | 0.05 | .260 | -0.04 | 0.14 |
| White Ethnicity (vs. others) | -0.19 | .043 | -0.38 | -0.01 |
| State | 0.40 | <.001 | 0.23 | 0.57 |
| Income | 0.03 | .545 | -0.06 | 0.11 |
| Bachelor’s degree | -0.16 | .067 | -0.33 | 0.01 |
| Constant | -0.21 | .038 | -0.42 | -0.01 |
| Hurricane Preparatory Behaviors\* 🡨 |  |  |  |  |
| Self-Efficacy | 0.23 | <.001 | 0.15 | 0.31 |
| Response Efficacy | 0.33 | <.001 | 0.25 | 0.41 |
| Perceived Susceptibility | 0.18 | <.001 | 0.09 | 0.27 |
| Perceived Severity | 0.03 | .549 | -0.06 | 0.11 |
| Gender | 0.07 | .297 | -0.06 | 0.19 |
| Age | 0.13 | <.001 | 0.07 | 0.19 |
| White Ethnicity (vs. others) | -0.10 | .170 | -0.23 | 0.04 |
| State | 0.29 | <.001 | 0.15 | 0.43 |
| Income | 0.07 | .041 | 0.003 | 0.13 |
| Bachelor’s degree | -0.01 | .827 | -0.15 | 0.12 |
| Constant | 0.72 | <.001 | 0.57 | 0.88 |
| Indirect Effects | | | | |
| Traditional Media 🡪 Hurricane Preparation |  |  |  |  |
| Via Self-Efficacy | 0.01 | 0.368 | -0.01 | 0.03 |
| Via Response Efficacy | 0.04 | 0.040 | 0.002 | 0.07 |
| Via Perceived Susceptibility | 0.04 | 0.014 | 0.01 | 0.07 |
| Via Perceived Severity | 0.004 | 0.561 | -0.01 | 0.02 |
| Social Media 🡪  Hurricane Preparation |  |  |  |  |
| Via Self-Efficacy | -0.01 | 0.526 | -0.03 | 0.01 |
| Via Response Efficacy | -0.005 | 0.792 | -0.04 | 0.03 |
| Via Perceived Susceptibility | -0.004 | 0.718 | -0.02 | 0.02 |
| Via Perceived Severity | 0.0001 | 0.947 | -0.002 | 0.002 |
| Error Variance |  |  |  |  |
| Self-Efficacy | 0.96 |  | 0.86 | 1.07 |
| Response Efficacy | 0.96 |  | 0.87 | 1.07 |
| Perceived Susceptibility | 0.81 |  | 0.72 | 0.90 |
| Perceived Severity | 0.94 |  | 0.85 | 1.05 |
| Error Covariance |  |  |  |  |
| Self-Efficacy \* Response Efficacy | 0.54 | <.001 | 0.44 | 0.64 |
| Perceived Susceptibility \* Perceived Severity | 0.49 | <.001 | 0.41 | 0.57 |

**ITEMS FROM SURVEY INSTRUMENTS**

1. **(Texas sample) In the days during and following Hurricane Harvey, how many hours per day**, on average, did you spend watching and/or listening to media coverage about it? Please estimate your average daily use for each of the media categories described below.

1. TV, Radio, Print News

2. Online news sources (CNN, Yahoo, NYTimes.com, etc.)

3. Social media (Facebook, Twitter, Reddit, etc.)

**Response options**

1. None

2. <1

3. 1

4. 2

5. 3

6. 4

7. 5

8. 6

9. 7

10. 8

11. 9

12. 10

13. 11+

1. **(Florida sample) Since the Hurricane Irma coverage began, how many hours per day**, on average, have you spent watching and/or listening to media coverage about it? Please estimate your average daily use for each of the media categories described below.

1. TV, Radio, Print News

2. Online news sources (CNN, Yahoo, NYTimes.com, etc.)

3. Social media (Facebook, Twitter, Reddit, etc.)

**Response options**

1. None

2. <1

3. 1

4. 2

5. 3

6. 4

7. 5

8. 6

9. 7

10. 8

11. 9

12. 10

13. 11+

1. **Q19 [GRID, S PER ROW]**

**In the days during and following the recent hurricanes, how many hours per day, on average, did you spend watching and/or listening to media coverage about them? Please estimate your average daily use for each of the media categories described below.**

**Response options**

1. None
2. <1
3. 1
4. 2
5. 3
6. 4
7. 5
8. 6
9. 7
10. 8
11. 9
12. 10
13. 11+
14. **In the past week, how many hours per day, on average, have you spent watching, reading, and/or listening to media coverage about the COVID-19 outbreak? Please estimate your average daily use for each of the media categories described below.**
15. TV, Radio, Print News
16. Online news sources (CNN, Yahoo, NYTimes.com, etc.)
17. Social media (Facebook, Twitter, Reddit, etc.)

**Response options**

1. None
2. <1
3. 1
4. 2
5. 3
6. 4
7. 5
8. 6
9. 7
10. 8
11. 9
12. 10
13. 11+
14. **How likely is it that the COVID-19 outbreak will harm your well-being (health, financial, emotional, social, etc.) in the future?**
15. Not at all likely
16. A little likely
17. Somewhat likely
18. Likely
19. Extremely likely
20. **If your well-being (health, financial, emotional, social, etc.) were to be harmed by the COVID-19 outbreak, how much would it be harmed?**
21. Not at all
22. A little
23. A moderate amount
24. A lot
25. A great deal
26. **The next set of questions deals with things that someone might do in response to the COVID-19 outbreak. How often have you done the following?**
27. Wash my hands for at least 20 seconds.
28. Wash my hands and/or use hand sanitizer after touching surfaces outside my home.
29. Avoid touching my face when in public.
30. Wear a face mask and/or gloves in public.
31. Avoid socializing with any people outside my household.
32. Avoid socializing in groups >10 with people outside my household.
33. Avoid public transportation (e.g., buses, subways, Uber, Lyft).
34. Minimize trips outside the home.
35. Cancel or reschedule travel plans.
36. Purchase extra supplies for my household (e.g., food, medicine, water, toilet paper).
37. Other, please specify:**[TEXTBOX]**
38. Never
39. Rarely
40. Sometimes
41. Often
42. All the time
43. **How much do you think the above actions will help reduce the harmful effects of the COVID-19 outbreak?**

1. Not at all

2. Just a little

3. Somewhat

4. Mostly

5. Completely

1. **How well do you think you could perform the above actions to reduce the harmful effects of the COVID-19 outbreak?**
2. Not well at all
3. A little well
4. Somewhat well
5. Mostly well
6. Extremely well
7. **How likely is it that your well-being (health, financial, emotional, social, etc.) will be impacted by a major hurricane (Category 3 or stronger) this year?**
8. Not at all likely
9. A little likely
10. Somewhat likely
11. Likely
12. Extremely likely
13. **If your community were to be impacted by a major hurricane (Category 3 or stronger) this year, how much do you think your well-being (health, financial, emotional, social, etc.) would be harmed?**
14. Not at all
15. A little
16. A moderate amount
17. A lot
18. A great deal
19. **There are many things that people might do to prepare for natural disasters like hurricanes. Please check all those that you have done to prepare for the 2020 hurricane season.**

1. Learn about the risks from hurricanes and how to prepare for them

2. Make a plan for safe places to move vehicle(s) in the event of a hurricane

3. Put together an emergency kit (e.g., food, medical supplies, flashlight)

4. Develop and practice an emergency plan

5. Identify shelter locations in the event of an evacuation

6. Copy important documents (e.g., birth certificates, driver’s licenses)

7. Get a row boat or inflatable raft

8. Make my home more hurricane proof (e.g., install hurricane shutters, sand bags)

9. Have flood insurance

10. Consider hurricane forecasts when making travel plans

11. Other, please specify: INSERT TEXT BOX

12. None of the above [s]

1. **Of the actions listed above, how much will they help to prepare for the 2020 hurricane season?**
2. Not at all
3. Just a little
4. Somewhat
5. Mostly
6. Completely
7. **Of the actions listed above, how well do you think you could perform them to prepare for the 2020 hurricane season?**
8. Not well at all
9. A little well
10. Somewhat well
11. Mostly well
12. Extremely well
13. **During the next five years, it is very likely a major hurricane (Category 3 or stronger) will happen near me.**
14. Strongly disagree
15. Disagree
16. Neither agree nor disagree
17. Agree
18. Strongly agree